

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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December 19, 2006

TO: Internal File

THRU: Wayne Western, Team Lead *W.W.*

FROM: Priscilla Burton, CPSSc, Environmental Scientist, III. *PWB by an*

RE: Phase I Bond Release for Reclaimed Areas, PacifiCorp, Deer Creek Mine, C/015/0018, Task ID #2674

### SUMMARY:

This application, received October 20, 2006, requests Phase I Bond release for 0.6 acres at the 9<sup>th</sup> East Portals site in Grimes Wash. Bond reduction is not requested. The reclaimed site includes five portals and an access road, reclaimed in the fall of 1999. The surface is owned by the United States, managed by the U.S. Forest Service.

The Phase I Bond release application contains:

Attachment A notarized certification;

Attachment B a prototype for public notice;

Attachment C letters to interested parties;

Attachment D: Reclamation Map DS1785D (providing an account of mass balance) and Bond Release Map DS1889D providing final contours, final mass/balance, and seeded areas;

Attachment F soil sampling map DS 1891D;

Attachment E photos;

Attachment F soils analysis.

A description of the reclamation is found in the MRP Volume 2, R645-301-500 Engineering Appendix R645-301-500-B and Volume 3, Appendix XIV, R645-301-500 Appendix A, Photos.

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**TECHNICAL MEMO**

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The Utah rule R645-301-880.310 allows for Phase I bond release after the completion of backfilling and regrading and drainage control of the bonded area in accordance with the approved plan. The Bond Release Directive Tech-006 (dated September 5, 2000) and Utah Regulations R645-301-880.100 through 880.310 guided this review of the bond release application.

The Permittee has met the minimum requirements of this regulation for Phase I bond release. The surface managing agency should be contacted for comments.

**TECHNICAL ANALYSIS:**

## **RECLAMATION PLAN**

### **TOPSOIL AND SUBSOIL**

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

#### **Analysis:**

##### **Redistribution**

No topsoil was applied. Surrounding soil berms were graded to provide fill and seeded. Approximately 1,500 yd<sup>3</sup> was moved. Soils analysis of an adjacent area taken in 1982, 2001, and 2006 indicate that the surrounding surface soils are not high in salts or pH. Soil sample locations are provided on Map DS1891D (and MRP Vol 2, Part 4).

Also pertinent is the overburden testing reported in Volume 3, App. XIV R645-301-600 Appendix. A, Overburden. These in-mine samples provide an indication of the mine spoil characteristics. According to these analyses, the SAR, EC, Se and Boron content of the spoil is within tolerable limits for native vegetation. Some of these 1994 to 1999 samples indicate that the oxidation of pyrite could create acidity. If so, it will be quickly neutralized by the native soils that are calcareous, with a neutralization potential of 250 to 400 t/1000t of soil (App. F.).

#### **Findings:**

The information provided meets the requirements for bond release.

## **STABILIZATION OF SURFACE AREAS**

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

### **Analysis:**

Erosion control for the 9<sup>th</sup> east portals was accomplished by gouging 1 ton/acre noxious weed-free hay into the surface soil and a surface straw mulch (1 ton/acre blown straw) and 500 lbs/ac of hydromulch and tackifier. The seed mix is described in MRP Volume 2, R645-301-500 Engineering Appendix R645-301-500-B. The Permittee has monitored the site twice a year for 8 years and has not reported any erosion problems (Reclamation Schedule in Appendix R645-301-500-B).

A Division inspector found the site well vegetated in June 2006 (personal communication from Pete Hess, 12/18/2006).

### **Findings:**

The information provided in the bond release application meets the bond release regulations.

### **RECOMMENDATIONS:**

The application meets the requirements for Phase I bond release. The surface managing agency should be contacted for comments.